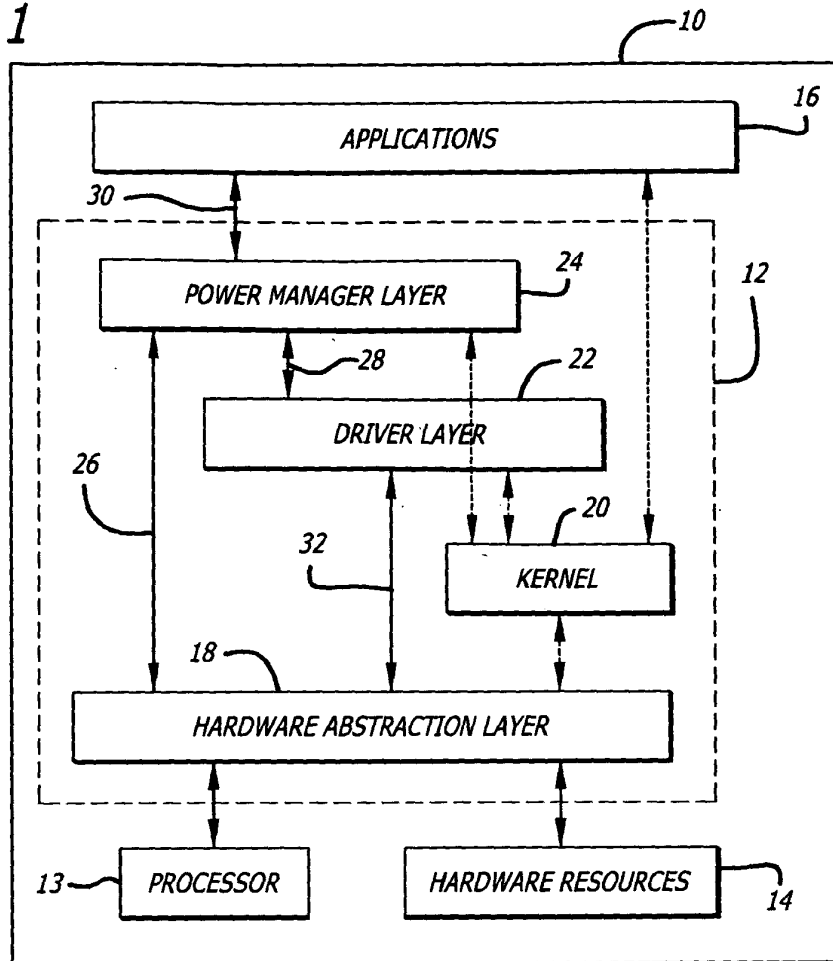


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FIG. 1



POLICY	$P_{ave}$ (W)	% REDUCTION
NO POLICY	3.25	0 %
CPU SHUTDOWN	2.69	17.2 %
CPU & DEVICE SHUTDOWN	1.60	50.7 %
CPU & DEVICE SHUTDOWN @191.7 MHz	1.49	54.1 %
CPU & DEVICE SHUTDOWN @176 MHz	1.35	58.4 %

FIG. 6

FIG. 2

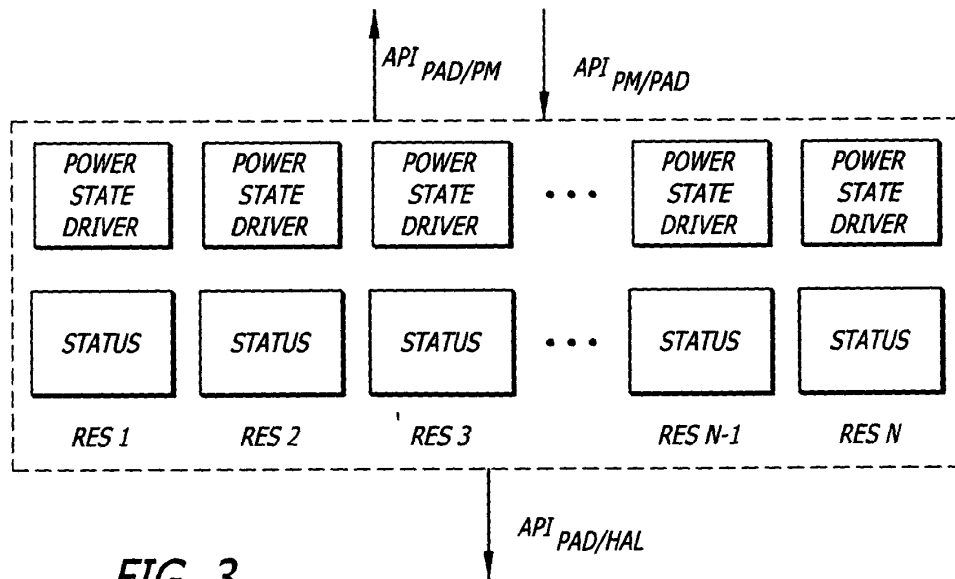
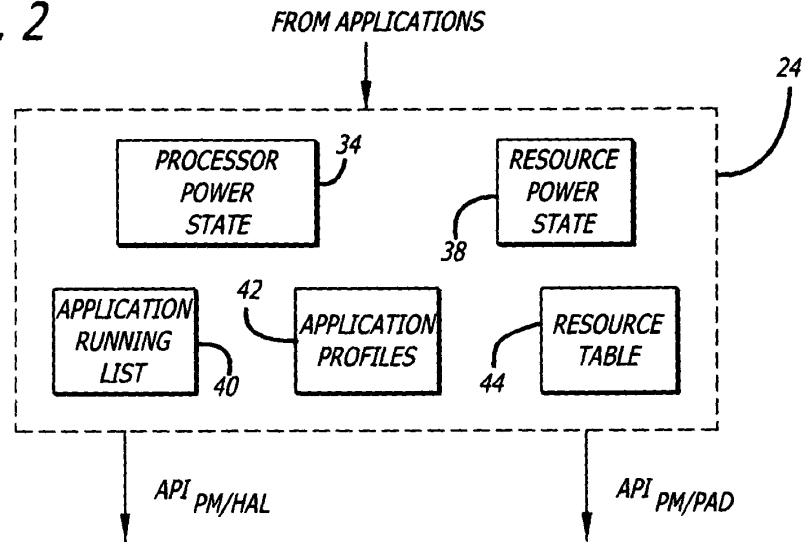


FIG. 3

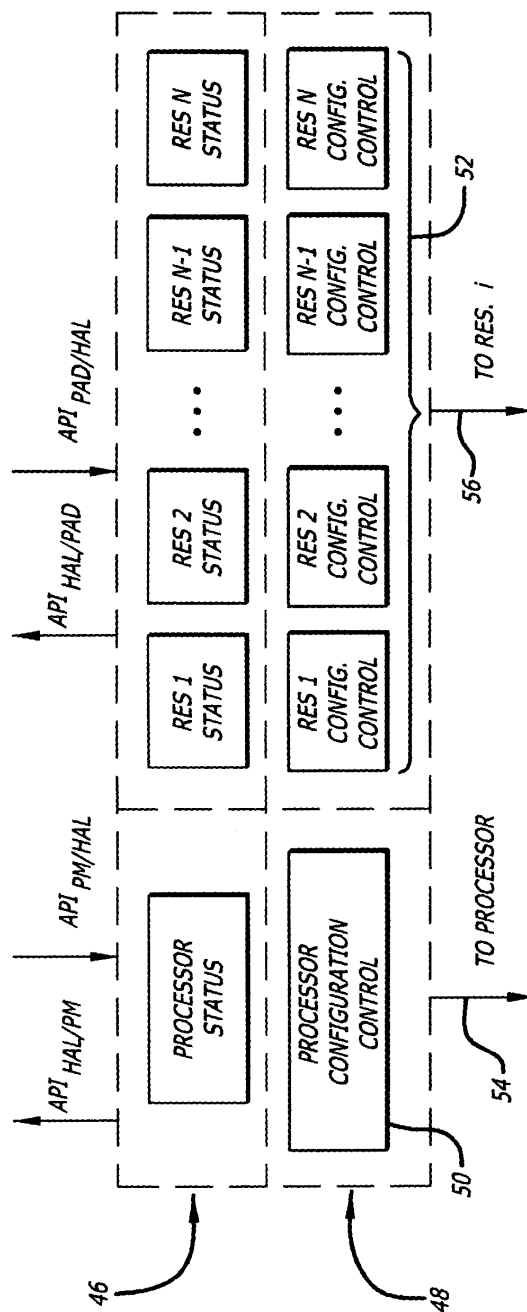


FIG. 4

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**FIG. 5**

	EVENTS	POWER MGR. LAYER	DRIVER LAYER	H. ABST. LAYER
(S-1)	SYSTEM OFF			
(S-2)	USER ACTIVATES SYSTEM	API PM/PAD, HAL CALLS (SYSTEM CAPABILITIES)	API PAD/PM CALL (HARDWARE CAPABILITIES)	1. TRANSITION CPU TO ACTIVE STATE 2. API HAL/PM CALL (CPU CAPABILITIES)
(S-3)	APPLICATION STARTS			
(S-4)	API CALL TO PM (APP. START)	LIST OF APPLICATIONS UPDATED		
(S-5)	API CALL TO PM (COMPUTING NEEDS)	1. RETRIEVE APPLICATION PROFILE 2. CALCULATE CPU SPEED 3. API PM/HAL CALL (-INFORM HAL OF SPEED)		SET CPU SPEED
(S-6)	API CALL TO PM (RESOURCE NEEDED)	1. UPDATE RESOURCE TABLE 2. API PM/PAD CALL (START RESOURCE (IF IDLE))	API PAD/HAL CALL (START RESOURCE (IF IDLE))	START HARDWARE RESOURCE IF NECESSARY
(S-7)	APPLICATION RUNNING			
(S-8)	API CALL TO PM (RESOURCE NO LONGER NEEDED)	1. UPDATE RESOURCE TABLE 2. API PM/PAD (TURN RESOURCE OFF UNLESS NEEDED FOR ANOTHER APPLICATION)	API PAD/HAL CALL (TURN OFF RESOURCE IF NOT NEEDED)	TURN OFF HARDWARE RES. IF NOT NEEDED
(S-9)	API TO PM CALL (APPLICATION COMPLETE)	1. UPDATE APPLICATION TABLE 2. RE-CALCULATE CPU SPEED 3. API PM/HAL (NEW CPU SPEED)		RE-SET CPU SPEED
(S-10)	ALL APPLICATIONS COMPLETE (API TO PM CALLS)	API PM/PAD, HAL CALLS (TRANSACTION ALL HARDWARE TO SLEEP)	API PAD/HAL CALL (TRANSACTION HARDWARE RESOURCES TO SLEEP)	TRANSITION ALL HARDWARE RESOURCES AND CPU TO SLEEP
(S-11)	SYSTEM OFF			